



PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/649,712
Filing Date	August 26, 2003
First Named Inventor	Ren, Fan
Art Unit	2812
Examiner Name	
Attorney Docket Number	5853-274

Sheet 1 of 1

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 6,107,649	08/22/2000	Zhao	
		US- 2001/0015437	08/23/2001	Ishii et al.	
		US- 6,140,169	10/31/2000	Kawai et al.	
		US- 5,929,457	7/27/1999	Kawai et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	†
		Country Code ² Number ⁴ Kind Code ³ (if known)				

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9/25/04

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PTO/SB/088 (08-03)

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NON PATENT LITERATURE DOCUMENTS

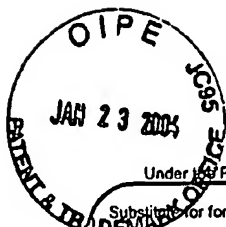
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
BMB		Hu et al., "Enhancement mode AlGaIn/GaN HFET with selectively grown pn junction gate," Electronics Letters, 36: 753-754, 2000.	
		Chen et al., "GaN Metal-insulator-semiconductor Field Effect Transistor Based on GaN/AlGaIn Double Hetrojunctions," Nanjing University, P.R. China.	
		Yoshida, S., Abstrat, "AlGaIn/GaN Power FET," Furukawa Review, 21: 7-11, 2002.	
		Valizadeh, P., Abstrat, "AlxGa 1-XN/GaN High Electron Mobility Transistor (HEMT).	

Examiner Signature		Date Considered	9/23/04
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Sheet 1	of 1	Attorney Docket Number	5853-274

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Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
BMB		Kim et al., "Inversion behavior in Sc2O3/GaN gated diodes," Appl. Phys. Lett., 81: 373-375, July 2002.	
		Simin et al., "7.5kW/mm2 current switch using AlGaIn/GaN metal-oxide-semiconductor heterostructure field effect transistor on SiC substrates," Electronics Letters, 36: November 2000.	
		Mistele et al., "First AlGaIn/GaN MOSFET with photoanodic gate dielectric," Materials Science and Engineering, B93, 107-111, 2002.	
		Khan et al., "Enhancement and depletion mode GaN/AlGaIn heterostructure field effect transistors," Appl. Phys. Lett., 68: 514-516, January 1996.	
		Simin, et al., "SiO2/AlGaIn/InGaIn/GaN MOSDHFTs," IEEE Electron Device Letters, 23: 458-460, August 2002.	
		Kim et al., "Characteristics of MgO/GaN gate-controlled metal-oxide-semiconductor diodes," Applied Physics Letter, 80: 4555-4557, June 2002.	
		Koudymov et al., "Maximum current in nitride-based heterostructure field-effect transistors," Applied Physics Letters, 80: 3216-3218, April 2002.	
		Hu et al., "Si3N4/AlGaIn/GaN-metal-insulator-semiconductor heterostructure field-effect transistors," Applied Physics Letters, 79: 2832-2834, October 2001.	
		Teles et al., "Spinodal decomposition in BxGa1-xN and BxAl1-xN alloys," Applied Physics Letters, 80: 1177-1179, February 2002.	
		Chou et al., AlGaIn/GaN Metal Oxide Semiconductor Heterostructure Field-Effect Transistor Based on a Liquid Phase Deposited Oxide," Jpn. J. Appl. Phys. 41: L748-L750, July 2002.	

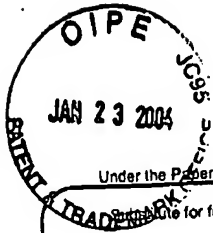
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		Number-Kind Code ² (If known)			
		US- 2002/0052078 A1	May 2, 2002	Khan et al.	—
		US- 6,429,467 B1	Aug. 6, 2002	Ando	—
		US-			
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